## The Field Problem Review Board:

## Finding Solutions to the Problems That Soldiers Experience

Ever since there have been tanks, tankers in the field have been finding things wrong with their design and functionality. Over 14 years ago, Team Abrams was formed, drawing together the efforts of the TRADOC System Manager, Abrams (TSM, Abrams); Project Manager, Abrams (PM, Abrams); the Tank Automotive and Armaments Command (TACOM); and General Dynamics Land Systems (GDLS). This unique program identifies and attempts to solve tank-related and Heavy Assault Bridge (HAB) concerns coming from the field.

The Field Problem Review Board (FPRB) has the mission of continuously monitoring reports from the field and from test sites to identify any problems affecting the safety, reliability, availability, maintainability, and performance of the Abrams and Wolverine HAB.

The FPRB meets in Warren, Mich. every second month. It is composed of design and safety engineers, reliability and maintainability (R&M) specialists, Quality Assurance (QA) engineers, logisticians, managers, and military representatives from Team Abrams. Field Service Representatives (FSRs) from GDLS, Logistic Assistance Officers (LAOs) at all posts, test officers from the Army's Proving Grounds, Team Abrams engineers and logisticians, and soldiers from the field all provide data on problems the Abrams fleet is experiencing.

You may wonder, after 108 FPRB meetings, what some of the Board's recent successes have been. One of the first problems identified with the Abrams platform was the air induction system on the AGT 1500 engine. The FPRB identified this problem from a number of sources, and then redesigned the pre-cleaner on the air induction system to reduce clogging and the consequent reduction of airflow into the engine. Next, they came up with the PulseJet Air System (PJAS) as a means to constantly clean the V-packs without physically taking them out of the tank.

These two fixes reduced the number of airflow or debris-related engine failures to a relatively miniscule level.

Not all fixes involve hardware. Recently, the fleet experienced problems with fires. The three leading causes were engine compartment fuel leaks, hydraulic leaks, and problems with the NBC system. The FPRB set up a mobile training team to educate soldiers on the NBC system and tank fire prevention. That team has gone to every post where there are Abrams tanks, training crews, maintainers, and leaders on how to properly maintain and inspect these areas to prevent fires.

The FPRB is tracking a number of issues and monitoring the effectiveness of the corrective actions being taken to resolve them. One example concerned recent transmission failures seen at Fort Hood. Last year, the FPRB implemented a modification to the transmission valve body and has been closely monitoring the situation to see if any more transmission failures occur. So far, none have occurred related to the valve body, but this continues to be a watch item.

The FPRB is currently tracking over 25 problems with the fleet. It has a database of over 18,000 field problem reports and over 68,000 test problem reports. With only 25 problems being tracked currently, you can see that the majority of design and production deficiencies are corrected before you even see the tank. Remember, though, that if you see a problem, report it! If you believe the problem is not being worked, then document it and report it again! The primary way to report a problem directly to the FPRB is via the Field Problem Management Hotline at 1-800-989-TANK. But you must also keep your chain of command aware of what you see, because they may already know of fixes that may be on the way to solve your problem.

The front line for identifying problems back to the FPRB are the GDLS FSRs. Team Abrams provides FSRs to every newly equipped battalion in the Armor Force for the first year after new equipment fielding. The FSR's first priority is providing both technical expertise and training to organizational maintainers. They also provide a conduit for reporting systemic problems back to the FPRB.

The LAO is another source for information regarding problems. Each post has an LAO staffed with TACOM logistics specialists. As the LAO for TACOM, they have a direct link to Team Abrams and the FPRB.

Team Abrams also actively searches out performance and R&M problems through continuous testing of the tank, primarily at Aberdeen and Yuma Proving Grounds. The test team continuously monitors whether the tank performs in accordance with its performance specifications and user requirements. Also, the conditions leading to field failure can be tested and data captured to solve the problem. The test community also tests the corrective actions to ensure the solution fixes the problem and does not create new problems

Quality assurance specialists constantly monitor the production of components going into the tank and HAB. These specialists are a key link in the FPRB process. They determine if a production line change may be causing the field problems. They also ensure that the suppliers and sub-contractors are producing parts for the tank in accordance with design and quality specifications.

Logisticians also play a key role in the FPRB process. They constantly monitor supply system demands to determine if items are being requested at rates inconsistent with their expected usage. The logistic fielding branches, with their constant contact with the field, also provide first-hand evidence of systemic problems being experienced in the field.

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Additionally, the logisticians plan the implementation of any modifications to the fleet resulting from solutions coming out of the FPRB.

The engineers of Team Abrams evaluate and design the fixes for problems coming from the field, and continuously evaluate new technologies to determine if they can improve the safety, reliability, availability, maintainability, and performance of the vehicles and their sub-systems.

The officers and NCOs of TSM Abrams also provide input. They provide a "sanity check" to ensure the fix to a problem passes the common sense test and will withstand use by soldiers in the field. They also act as a conduit, focusing attention on problems in the field based on their visits to units.

A final, but also most important, source of information about problems in the field is the soldier himself. The FPRB has three telephone numbers, 800-989-TANK, 800-989-8265, and 810-825-5259. Any soldier can call and leave a message regarding any problems they are having with either the Abrams or the HAB. When calling these numbers, soldiers should leave a short message describing the problem they are experiencing, their unit, their rank and name, and a number where they can be contacted for follow-up. An alternate solution is to go to the Team Abrams web page at www.tacom.army.mil/gcss/pmabrams. You can also email MAJs Carson or Finn, the M1A2 and M1A1 team chiefs for TSM Abrams, at:

craig.carson@knox.army.mil

dennis.finn@knox.army.mil

After each meeting, the FPRB publishes its minutes and sends a copy to every Armor/Cavalry battalion, heavy brigade, and heavy division commander and executive officer in the Army. The minutes are also available on the III Corps LAN in the public folders under "PM Abrams."